

**A CATHETER WITH STENT AND METHOD  
FOR THE PRODUCTION OF A CATHETER WITH STENT**

**ABSTRACT**

The present invention relates to a catheter systems for introducing and  
5 implanting an expandable stent member in a body. The catheter includes a catheter  
member having first and second ends, the first end having an inflatable portion, a lumen  
in fluid communication with the inflatable portion and the second end for inflating the  
inflatable portion. The expandable stent member is capable of permanent deformation  
when expanded. At least a portion of the stent member is attached to the inflatable  
10 portion by a bond and whereby upon inflation of the inflatable portion the bond is  
released from the stent member to permit deployment of the stent member and removal  
of the catheter member. The bond may be formed by the same or different material than  
the balloon surface. For example, an adhesive may be used. Additionally, the surface of  
the balloon may be softened and the stent member may be embedded into the softened  
15 portion and allowed to return to its original unsoftened state, thereby adhesively  
connecting the stent to the inflatable balloon.